

California Integrated Waste Management Board

October 2007

Staff Report To The Board

Manufacturer Responsibility: Report to the Legislature

STATE OF CALIFORNIA

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Executive Summary

The Legislature, in enacting the FY 2006-07 Budget, charged the California Integrated Waste Management Board (CIWMB) with evaluating the feasibility of implementing a manufacturer responsibility or take-back program for those goods purchased by California state government and to provide a report with specific metrics to the Legislature by January 1, 2008.

The terms "manufacturer responsibility," "producer responsibility," "product stewardship," "take-back program," and "extended producer responsibility" are all closely related. CIWMB defines Extended Producer Responsibility (EPR) as: the responsibility of producers, and all entities involved in the product chain to reduce the cradle-to-cradle impacts of a product and its packaging. In this case, "cradle-to-cradle" refers to the full life-cycle of a product, including recycling or reuse. This policy places the greatest responsibility on the producer or brand owner, who makes design and marketing decisions. It focuses on enhancing environmental benefits through (1) product design for improved reduction and reuse, and (2) increased collection and recycling where needed. Both are accomplished without transferring end-of-life (EOL) management problems to other countries or to other environmental media.

The European Union and the Canadian province of British Columbia are among governmental bodies around the world that have adopted EPR or similar policies and applied them to such products as: electronics, packaging, chemicals, paint, pharmaceuticals, solvents, flammable liquids, and vehicles. In general, a government develops authorizing directives or legislation that establishes specific targets for selected product categories, and sets parameters for ensuring manufacturer compliance. Manufacturers then develop and implement programs to comply with the regulations.

In California, the Department of General Services (DGS), through its contracting process, conducts 60 to 70 percent of the State's procurement; the remainder is accomplished through individual agency purchasing. An avenue for advancing EPR principles through the DGS contracting process is Environmentally Preferable Purchasing (EPP). EPP is implemented by including environmental attributes in product specifications, along with traditional requirements for quality and service. The EPP Task Force, led jointly by DGS and CIWMB, has identified products with established environmental standards and has worked to incorporate relevant provisions into DGS contracts. As a result, over the last several years DGS has incorporated environmental standards related to energy, recycled content, indoor air quality, and other parameters into commodity contracts for products such as fluorescent lamps, computer products, office supplies, and office furniture. In addition, a few State procurement contracts also have some take-back/collection provisions for products such as computer products, automotive leadacid batteries, and body armor and vests.

For some products, California state government is a large enough purchaser by itself to motivate change by producers. For example, as a result of California's low permissible mercury level requirements, a supplier incorporated specification changes in future production to remain competitive for the State's lamp contract. However, when acting in unison with other large institutional purchasers, California can have an even greater impact, demonstrated by procurement of computer equipment certified to the standards of the Electronic Products Environmental Assessment Tool (EPEAT), an initiative started under the auspices of the U.S. Environmental Protection Agency. In one year, the participation of manufacturers grew from three manufacturers with 60 certified products to 23 manufacturers with more than 600 certified products.

All State agencies also are required to extend the useful life of surplus property in their possession, following specific guidelines provided by the DGS Office of Fleet and Asset Management. The

guidelines include provisions for transferring property to other state departments and public schools. The most common categories of surplus property are electronic equipment, furniture, and vehicles. Due to conflicting objectives, State-owned surplus personal property presents EPR implementation challenges. Leasing is one option but must be approved through the State Surplus Program. Also, because the State purchases primarily through vendors rather than manufacturers, this may not be feasible. One exception is procurement through the Prison Industry Authority (PIA). PIA administers a take-back and remanufacture program for cotton mattresses for all Department of Corrections and Rehabilitation institutions. In contrast, PIA-manufactured office furniture cannot be taken back due to a number of factors.

Additional products or product categories might be amenable to inclusion of EPR program elements in state contracts. These include personal computer components, vehicles, office supplies, liquid fuels, office furniture/panel systems, road materials, prefabricated portable buildings, pest weed control agents, and paint and varnish-related products. Many EPR programs elsewhere already include some of these products, such as personal computer components and paint and varnish-related products. Additionally, there are already environmental criteria developed for some products such as prefabricated portable buildings.

Assessing the effectiveness of procurement contracts that have EPP and/or take-back provisions is difficult for several reasons. Most of these contracts are relatively recent and were developed without mandatory reporting requirements or the necessary resources and procurement systems to develop a database for tracking EPP purchases. As a result, insufficient data exists to accurately assess the effectiveness of these provisions.

Recommendations

To further implement an effective EPR policy in California, staff recommends that DGS, in consultation with CIWMB, examine the use of current recycling contracts and surplus property operations and then make recommendations for considering EPR requirements in commodity contracts, recycling contracts, and surplus property policies and procedures. The assessment and recommendations could then be incorporated into the EPP Statewide Task Force Action Planning process for 2008. In addition, in order to improve future evaluations of the effectiveness of the State procurement process in stimulating both EPR and EPP, CIWMB has eight recommendations:

- 1) DGS could, in consultation with CIWMB and the EPP Task Force, assess the feasibility of including additional EPR requirements in its upcoming commodity contracts. This could include a discussion of whether contract provisions designed to influence product design to ensure a more reusable and recyclable product would be a practical vehicle to promote manufacturer responsibility.
- 2) DGS could become more involved in the evaluation and development of national environmental standards for product certification, on a product-by-product basis. Resulting standards for environmentally preferable products could be incorporated into commodity contracts by reference and could serve in tracking the State's advances in environmentally preferable purchasing, including product design, take-back and other producer responsibility programs. In some cases this could become necessary to help the State determine environmental benefits such as reductions in greenhouse gas emissions associated with products.
- 3) The results of this assessment could be incorporated into the EPP Task Force Action Planning process for 2008. DGS, in consultation with the EPP Task Force, could develop a Tracking and Reporting

- Plan based on the results of the assessment and, as applicable, establish the next steps for implementation. The progress of any deliverables should be reported annually to the Task Force.
- 4) To facilitate future evaluations of the effectiveness of the State procurement process in stimulating both EPR and EPP purchases, DGS could design and implement, as resources and new procurement system capabilities allow, an e-procurement data system that would include the ability to track EPR and EPP purchases from both its own contracts and those of other procuring agencies. This would also enable DGS to develop a baseline for comparing old and new contracts in terms of cost, performance, and environmental and health effects related to procurement. This may require the appropriation of DGS staff resources dedicated to analyzing data and reporting back to DGS and the EPP Task Force.
- 5) State agencies could be required to report to DGS on the extent to which environmental specifications, including producer responsibility, are incorporated in statewide contracts and in purchasing agreements made under delegated authority. This would ensure that State agencies which purchase separate from DGS statewide contracts incorporate environmental considerations, including producer responsibility, into their purchasing decisions and report that activity to DGS. Vendors also could be required to report the use of take-back provisions in contracts and purchases of environmentally preferable products and services.
- 6) DGS' training program for State procurement officials should continue to raise awareness of take-back provisions and other producer responsibility programs. For example, if a new contract incorporates take-back language, users should be equipped to properly apply the provision, along with all applicable policies and procedures. These can be incorporated into documents and training created for contract users.
- 7) DGS could work with other large institutional purchasers, both internal and external to the State, to leverage the market and foster additional design changes and take-back programs for targeted products. For example, California can work with the Western States Contracting Alliance (WSCA) to better incorporate producer responsibility and other environmental considerations into contracts.
- 8) DGS could review surplus property policies and procedures and modify as necessary to remove barriers to product reuse, recycling and take-back, while ensuring proper management of State property.

Section 1. Extended Producer Responsibility (EPR): The Solution

The Legislature, in enacting the FY 2006-07 Budget, charged the California Integrated Waste Management Board (CIWMB) as follows:

The Board, in conjunction with the Department of General Services, shall evaluate the feasibility of implementing a manufacturer responsibility or take-back program for those goods purchased by California state government. This study should focus on those materials that are, or could be most conducive to reuse or recycling by the manufacturer together with materials that make up a substantial portion of state government waste stream. Further, it should assess the effectiveness of current take-back provisions in state contracts. This evaluation shall result in a report to the Legislature by January 1, 2008, and shall include an overview of similar activities that are occurring across the country or around the world that may serve as a model for California in the future.

For purposes of this report, extended producer responsibility is defined as the extension of the responsibility of producers, and all entities involved in the product chain, to reduce the cradle-to-cradle impacts of a product and its packaging. The greatest responsibility lies with the producer, or brand owner, who makes design and marketing decisions. This definition recognizes a shared responsibility, but one that lies mostly with the producer. The reference to the product chain refers to suppliers, manufacturers, retailers, users, and recyclers. EPR focuses on enhancing environmental benefits through improved product design for reduction and reuse, and increased collection and recycling where needed, without transferring end-of-life management problems elsewhere. Cradle-to-cradle impacts include energy, water, and materials use; greenhouse gas and other air emissions; toxic and hazardous substances; materials recovery and waste disposal; and worker safety. EPR encompasses activities from product design through EOL issues, as well as another policy: environmentally preferable purchasing (EPP).

Problem Statement

Currently, local governments and general ratepayers pay the majority of waste management costs. These costs are significant and constantly increasing. The rise in waste management costs is due, in part, to both the changing nature and increasing quantities of waste generated. Over the previous century, the nature of waste generated in the United States has changed from primarily coal ash from cooking and heating, food waste, and simple manufactured products such as glass and paper, to more complex manufactured products and packaging, including electronic products, plastic packaging, and household hazardous waste. The latter have significant EOL management issues and costs.

California currently addresses products with problematic EOL management issues through a patchwork of legislation, either product-specific (e.g., lighting, computers, tires) or substance-specific (e.g., mercury, lead, brominated flame retardants). To date, legislative and voluntary initiatives in California that involve producers in some manner in product design and EOL management have focused on one product or product category at a time. This has resulted in a lack of consistency in resolving these issues.

Solution: EPR

Based on discussions at national conferences, in the California Legislature, and at CIWMB workshops, there is growing interest in using EPR approaches to solve EOL management issues by placing a shared

responsibility on the manufacturers and users of products. An EPR Framework, as used elsewhere in the world, offers an alternative to the existing piecemeal approach. By allowing the customization of individual product stewardship programs, an EPR Framework provides the most effective approach for any particular product or product category.

EPR shifts the responsibility for the EOL management of discarded products and materials from the government to private industry, thereby incorporating the costs of product collection, recycling, and/or disposal into product price. EPR encourages product design, source reduction, and reuse, resulting in a reduced impact on human health and the environment.

EPR policy objectives include:

- Achieving an equitable distribution of costs among producers and consumers of products.
- Designing product stewardship programs that maximize economic efficiency and market innovation.
- Providing measurable net environmental benefits throughout a product's life cycle.

Through the contracting process, the Department of General Services (DGS) is responsible for 60 to 70 percent of all State procurement. DGS has made significant progress in using the purchasing power of California State government to increase the availability and use of environmentally preferred products and to incorporate EPR requirements in some of its contracts. For example, DGS, in collaboration with CIWMB and other agencies, has produced and regularly updates the *EPP Best Practices Manual* to speed implementation of EPP procurement through State and local government. In addition, DGS included take-back requirements in strategic-sourced contracts. The idea behind strategic sourcing is to create a large-volume procurement that will leverage the State's spending and obtain the lowest prices overall. At times, this can be diametric to environmental specifications which require targeted and balanced application for specific products to achieve environmental improvements. DGS, however, is working to reconcile the State's business directive with the objective of leveraging California's purchasing power to further EPP, EPR, and take-back requirements for State purchases.

In order to further the implementation of EPR policy at the State level, DGS needs to reinforce existing EPP and expand contracts where appropriate to include EPR or take-back requirements. While DGS conducts 60 to 70 percent of the State's purchasing, the remainder is achieved through individual agency purchasing. This means there are thousands of employees across the state that have a role in making purchasing decisions. Consequently, it is recommended that State agencies be required to report to DGS on the extent to which environmental specifications, including producer responsibility, are incorporated in statewide contracts and in purchasing agreements made under delegated authority. Along with mandatory reporting requirements, the education and training of State procurement officials is key to ensuring that contract users understand the provisions and procedures of take-back programs.

As resources allow, DGS could implement a tracking and reporting process for EPP purchases to assess the performance of existing contracts, and determine the feasibility of including new provisions in upcoming commodity contracts to promote product design changes. Based on the appropriation of resources and the capability of new procurement systems in undertaking such a task, another recommendation is that DGS develop a database to track EPR and EPP purchases and to evaluate effectiveness, and that progress on this be reported annually to the Task Force.

DGS could further leverage its purchasing power by working with large institutional purchasers, both internal and external to the State, to become more involved in the development of national environmental standards or criteria for products. By exercising influence in the development of national environmental

standards for product certification, DGS could then explore the incorporation of the standards into commodity contracts by reference and improve the ability of DGS to track the State's performance in promoting EPP and further EPR through take-back and product design advancements.

Section 2. Overview of EPR and EPP Activities

International and National EPR Models

CIWMB researched and solicited information from a variety of sources to prepare this analysis. This included a wide search of international and domestic reports, legislation, planning documents, presentations, websites, other written documents, and knowledge gathered from staff participation in EPR-focused conferences, workshops, and dialogues. Specifically, staff analyzed the Framework models used in British Columbia, Canada; the European Union; and draft legislation being considered for the State of Washington.

British Columbia, Canada

<u>Authorizing Legislation:</u> The Environmental Management Act in British Columbia provides very broad environmental protection authority, while the "Recycling Regulation" provides the legal basis for Product Stewardship Programs. The Recycling Regulation requires that a producer, or a stewardship organization operating on behalf of a producer, must have an approved product stewardship plan and comply with that plan. The Director of the Ministry of Environment has a key role in determining which producers must comply, approving plans, and providing oversight, among other responsibilities.

<u>Products Covered:</u> Eleven product categories: beverage containers; solvent and flammable liquids; pesticide products; gasoline products; pharmaceutical products; lubricating oil products; empty oil containers; oil filters; paints; electronic products (computer monitors, computer peripherals, desktop printers); and tires.

<u>Goals and Targets:</u> Policy goals include fairness for taxpayers and enhanced accountability, self-enforcing mechanisms, reduced overall costs, and continuous system innovation through results-based regulation. For numeric targets, the Recycling Regulations require that each product stewardship plan be designed to achieve either a 75 percent recovery rate or a higher recovery rate established by the Director. The direction and plan can include additional performance requirements or targets.

European Union

<u>Authorizing Legislation:</u> A set of European Directives focuses on specific product categories (packaging, electronics, chemicals, vehicles) and contains numeric goals. Member countries must "transpose" directives into legislation/regulation by specific dates. The Directives related to producer responsibility appear to be focused on distinct product categories, which better enables them to include numeric goals in the Directives.

<u>Products Covered:</u> Although it may appear that few products are covered, the Waste Electrical and Electronic Equipment Directive (WEEE Directive) covers the category "electronics." It includes ten product sub-categories: large household appliances; small household appliances; IT and telecommunications; consumer equipment; lighting equipment; electrical and electronic tools; toys, leisure and sports; medical products; monitoring and control instruments; and automatic dispensers.

There are numerous products under each of the categories above. In all, the WEEE Directive covers approximately 100 products. Likewise, the Research, Evaluation, and Authorization of Chemicals

(REACH) Directive covers thousands of chemicals and the Packaging Directive addresses all kinds of packaging.

Goals and Targets: Each directive contains specific goals, targets, and requirements that member states must incorporate into their own regulations or laws. For example, the WEEE Directive has a goal of separate collection of at least four kilograms (approximately 8.8 pounds) per person from private households annually. There are also specific recovery targets for product categories.

State of Washington

<u>Authorizing Legislation (in development):</u> The Northwest Product Stewardship Council (NWPSC) is drafting EPR legislation for the State using a Framework approach. It is based on Framework legislation and regulations used in Saskatchewan and British Columbia, Canada. The summary below is based on draft language and could change significantly.

Key features:

- Director or designee of the Department of Ecology (or it may remain with the legislature) designates products and product categories covered by the act.
- Producers establish product stewardship programs.
- Product stewardship programs pay all administrative and operational costs associated with collection, transportation, recycling, and disposal of the products covered by the program.
- Timeline for implementing product stewardship programs (540 days from date that the product is designated by Director).
- At least once every two years, the Director will recommend additional product categories.
- Director appoints 12 persons to an advisory committee to give advice on products, product categories, and covered entities.
- Producers or their designee apply to the Director for program approval.
- Annual reporting.
- Director is authorized to develop rules and regulations necessary to enact act.

<u>Products Covered:</u> This has not yet been determined. Product categories will be selected using the process and priorities set out in Washington's Framework legislation.

Goals and Targets: Plans will be outcome and performance-based.

CIWMB Work on EPR

In early 2007, the CIWMB adopted Strategic Directive 5 that calls for producers to assume responsibility for the safe stewardship of their materials in order to promote environmental sustainability. Also, it calls for CIWMB staff to analyze the feasibility of various approaches to increasing producer responsibility. Strategic Directive 5 specifically states that the CIWMB will:

- (a) Utilize existing CIWMB authority to foster "cradle-to-cradle" (lifecycle) producer responsibility.
- (b) Seek statutory authority to foster "cradle-to-cradle" producer responsibility.
- (c) Analyze the feasibility of various approaches to increasing producer responsibility, including during the product design and packaging phases, and make recommendations to the Board by December 2007, and annually thereafter.

- (d) Build capacity and knowledge in CIWMB on Extended Producer Responsibility (EPR) issues and solutions.
- (e) Develop and maintain relationships with stakeholders that result in producer-financed and producer-managed systems for product discards.

In June 2007, CIWMB conducted a public workshop on Producer Responsibility to lay the groundwork for implementation of Strategic Directive 5. At the workshop, staff provided an overview of existing policies and implementation approaches in which producers assume responsibility for the safe stewardship of their products. Various stakeholders representing local governments, trade associations, industry, and environmental advocates provided comments. Subsequently, in September 2007, CIWMB adopted an EPR framework as an overall policy priority to guide proposals for seeking statutory authority. Currently, it is in the process of seeking further stakeholder input to refine the framework and methodology of priority product selection.

In July 2007, CIWMB also completed a research contract examining alternate financing strategies and models for universal waste (u-waste) and paint EOL management that might be implemented in California. The report, "Framework for Evaluating End-Of-Life Product Management Systems in California," examines alternate financing strategies for u-waste and paint EOL management and offers a recommended framework approach for evaluating EOL product management systems that can be applied to a range of product types.

EPR-related initiatives CIWMB is currently involved in include the Paint Product Stewardship Initiative, Plastic Film Packaging and Plastic Container Recycling, Electronics Recycling, and the Universal Waste Take-It-Back Partnership.

California EPP Policy and Statewide Task Force

The California Legislature established EPP policy in statute¹ and defined "environmentally preferable purchasing" as the procurement or acquisition of goods and services that have a lesser or reduced effect on human health and the environment when compared with competing goods or services that serve the same purpose. This comparison is to take into consideration, to the extent feasible, raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, disposal, energy efficiency, product performance, durability, safety, the needs of the purchaser, and cost.

The EPP Task Force is co-chaired by the Deputy Director of the Procurement Division of DGS, for State and Consumer Services Agency (SCSA), and the Executive Director of the CIWMB, for Cal/EPA. The EPP Task Force Charter² provides an overview and justification for the Task Force's work and describes its objectives, deliverables, responsibilities, resources, and principal sponsors. Per AB 498 (Chan, Chapter 575, Statutes of 2002), the partnership between the DGS and CIWMB includes, but is not limited to, activities that promote environmentally preferable purchasing, and that incorporate life cycle considerations in purchasing decisions to the extent feasible.

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¹ Environmentally Preferable Purchasing (EPP) State law PCC § 12400-12404. Also known as AB 498 (Chan, Chapter 575, Statutes of 2002).

² For additional information about the EPP Task Force refer to its charter document: http://www.ciwmb.ca.gov/EPP/TaskForce/Charter.htm

A variety of mechanisms exist to advance EPR principles through EPP. EPP is implemented by including environmental attributes in product specifications in a contract solicitation, along with traditional requirements of quality and service. The specifications can be:

- Mandatory for the successful bidder to demonstrate compliance;
- Offered as preference points—bidders can gain competitive advantage if all else is equal;
- Requests for information—assists in greening the next contract cycle;
- Requirement for sale in the State of California—e.g., take-back requirement for cell phones.

In addition to solicitations for bids, the State of California can issue requests for information outside the bidding process to help inform and prioritize EPP actions.

DGS and CIWMB monitor the Monthly Statewide Commodity Contracts Listing Report (an Excel spreadsheet) to identify contracts expiring within six months as well as expired contracts, review EPP issues and contacts, and initiate development of updated contract language.

The EPP Statewide Task Force has made significant progress through its involvement with the DGS, as the department has worked to "green" State procurement.

EPR and EPP in State Contracts and Programs

EPR and EPP programs may be implemented in a complementary way to advance environmental protection through compliance with environmental performance standards. Environmental performance standards, when included in State government procurement specifications and contracts, can address various life-cycle stages, from manufacturing and product design to end-of-life considerations such as take-back requirements.

Institutional purchasers, such as government agencies and large companies, as well as individual consumers have expressed increasing demand for environmentally preferred products as they exercise their responsibility to prevent pollution. Institutional purchasers play an important role in environmental protection as they "drive the market" by working to "green" their own contracts and specifications over time. This includes adopting existing third-party standards or labeling requirements as well as participating in multi-stakeholder working groups to improve third-party standards. The producers or manufacturers who are best able to respond are rewarded in the marketplace.

For some products, California state government is a large enough purchaser by itself to motivate producers to change their design. A good example is the current California lamp contract, which set a low level for permissible amounts of mercury in each lamp. A supplier that was unable to meet the specification then planned changes in production to be able to compete for the next contract. However, when acting in unison with other large institutional purchasers, it can have a significant impact, as demonstrated by procurement of computer equipment certified to the standards of the Electronic Products Environmental Assessment Tool (EPEAT). In one year, the participation of manufacturers grew from three manufacturers with 60 certified products to 23 manufacturers with over 600 certified products. Furthermore, there are a growing number of products certified at EPEAT's highest "gold" level. Part of this success comes from the concerted effort by the U.S. Environmental Protection Agency (US EPA) to reach out to large institutional purchasers in the private and public sectors. The EPEAT initiative has resulted in manufacturers implementing design changes to their products in order to meet the criteria for certification.

Additional products or product categories might be amenable to inclusion of EPR program elements in state contracts. One starting point is a listing of priority categories developed by Green Seal in 2002 for the State and included in a draft "EPP Tracking and Reporting Plan" dated October 25, 2006. This listing includes personal computer components, vehicles, office supplies, liquid fuels, office furniture/panel systems, road materials, prefabricated portable buildings, pest weed control agents, and paint and varnish-related products. Some of these products, such as personal computer components and paint and varnish-related products, have been included in many EPR programs elsewhere, and environmental criteria have been developed for others such as prefabricated portable buildings.

Section 3. Identification of Materials Conducive to EPR

This section includes a listing of products and materials that have either been included in EPR programs elsewhere, or have been considered in the literature, or were considered in the CIWMB's preliminary analyses for Strategic Directive 5: Producer Responsibility. The CIWMB is currently engaging in further stakeholder consultation that will include product selection methodology and criteria for priority products. This list provides a starting point for considering which commodities have better potential for incorporating an EPR approach in procurement contracts.

The following list shows 27 product categories that present some end-of-life management challenges and are viewed as suitable for EPR by some government entity.

- Automobiles, particularly shredder residue
- Automobile oil (used oil)
- Batteries (auto, Ni-Cd)
- Cameras (single-use)
- Carpet
- Cell phones and cell phone batteries
- Chemicals
- Computers
- Containers (for pesticides and other chemicals, and beverages)
- Copy machines
- Construction materials
- Fluorescent lamps
- Furniture
- Household hazardous wastes (HHW)

- Newsprint
- Packaging
- Paint
- Pharmaceuticals
- Plastic bags
- Solvents, Flammable Liquids, Gasoline and Pesticides
- Televisions
- Textiles
- Tires
- Toys (including promotional materials)
- Universal wastes
- Vehicles
- White goods

In evaluating the feasibility of implementing EPR or take-back requirements on products or materials, it would be helpful to identify the following:

- Materials or products the State has contracting control over that could be conducive to takeback requirements, such as surplus property (including furniture and electronics), recyclable office paper, and beverage containers.
- Materials generated as part of the State's waste stream that could be diverted or recycled, such as construction/demolition materials, and organics for composting.

Section 4. Current Contracts with Take-back Provisions

DGS identified current statewide contracts with take-back provisions (see Table below). Ten contracts initiated over the past few years have incorporated take-back provisions. The contracts include office equipment and supplies such as ink and toner cartridges, copiers, and cell phones; State garage items such as batteries, oil, and grease; law enforcement materials such as motorcycles, armor, and weapons; and pharmaceuticals. Benefits from these take-back provisions can include either reduced end-of-life management costs or progress in driving improvements in product life cycle design through market demand.

Most procurement contracts that have take-back provisions are relatively recent and suppliers may be under-reporting usage data. Therefore, there is insufficient data to assess effectiveness of these contracts. DGS and CIWMB staffs are working to develop regular assessments of the effectiveness of these provisions with reports on overall EPP implementation by the EPP Task Force, including take-back provisions. In order to assess the effectiveness of current take-back provisions in State contracts, DGS could implement a tracking and reporting plan with a database that records EPR and EPP purchases from both DGS contracts and contracts entered into by individual State agencies. This would allow DGS to establish a baseline of EPR and EPP contracts, make comparisons and chart progress, and assess the feasibility of including additional EPR and EPP requirements in upcoming contracts.

Current Contracts with Take-back Provisions

Commodity	Contract No.	Effective	Comments
		Dates	
Automotive	1-07-61-01	06/25/07 -	Contract requires replacement for defective
lead acid		06/24/08	batteries.
batteries			State law requires that retailers accept the trade-in
			of spent lead-acid battery by a consumer upon
			purchase of a new one (Health and Safety Code
			Section 25215.3). Contract requires that dealer
			accept back old battery and all batteries must be
			returned to an authorized battery recycler.
Body armor,	1-07-84-07	04/10/07 -	• In the event of a product recall, contractor will
vests, ballistic		04/09/09	ensure recalled products will be picked up, tested,
and stab/thrust			destroyed or returned to the manufacturer at no
			expense to the State.
Copiers	1S-05-36-20	07/07/05 -	• Strategically sourced contract. ³ The user's guide
	(SHARP)	07/06/08	describes the process for surplus property. No
			manufacturer take-back provision exists.

Commodity	Contract No.	Effective Dates	Comments
Desktop Computers and Workstations	1S-05-70-01	06/30/05 - 12/31/07	 RFP asked bidders to provide information on takeback. Trade-ins are allowed on current hardware (i.e., desktops, notebooks, etc.). The new environmental certification for computers, Electronic Product Environmental Assessment Tool (EPEAT), requires certified manufacturers to offer take-back; however, for this to occur, future contracts will need to include this provision.
Ink and toner cartridges	Office Depot Office Supply Contract 1S-06-75-55	08/31/06 - 08/30/08	 Strategically sourced contract. State agencies should purchase cartridges that meet the requirements set forth in statute. Per Office Depot's Green Book, free prepaid boxes can be ordered by departments to return the product for recycling.
Lube, oil, and grease	1-04-91-03	12/22/04 - 12/31/07	Returnable steel barrels are owned by the contractor and returned. The containers are on the invoice, which is then cancelled or refunded upon return of the containers in good condition.
Motorcycle, enforcement	1-07-23-30	06/07/07- 06/06/09	Contract has a buy-back provision whereby state and local agencies can require the supplier to repurchase motorcycles purchased through the contract. Some conditions exist, such as the repurchase must occur within 36 month or 61,000 miles, whichever occurs first.
Pharmaceuticals	Statewide Contract # 1- 07-56054-A, Supplement #1 Contract for Pharmaceutic al Reverse Distribution and Destruction Supplemental	05/18/07- 10/31/07	The contract provides "reverse distribution," the process through which pharmaceuticals are returned to the manufacturer for credit. These drugs are expired or partial bottles, which are not returnable through the Pharmaceutical Wholesaler Agreement. Each manufacturer maintains policies and guidelines for returns of pharmaceuticals. The reverse distributor works with the manufacturers and the State Agencies to determine which products qualify for reverse distribution and how much credit the State Agency should receive. Many pharmaceuticals which are expired and do not meet the criteria for reverse distribution are able to be destroyed. The reverse distributor offers the destruction service based on weight.
Service revolvers	Purchase Order 61027 was issued 05/10/06 to Smith and Wesson.	One time acquisition	Law enforcement officers may keep retired guns for personal use. Others are returned to supplier. Supplier is required to dispose and document.

Commodity	Contract No.	Effective	Comments
-		Dates	
Wireless	<u>1S-05-58-01</u>	10/03/05-	• Cell Phone Recycling Act of 2004 (AB 2901,
equipment and	(Sprint)	10/02/07	Pavley, Chapter 891, Statutes of 2004) requires
services			that as of July 1, 2006, retailers selling cell phones
	<u>1S-05-58-02</u>	10/03/05-	in California have a system for the acceptance and
	(Verizon)	10/02/08	collection of used cell phones for reuse, recycling,
			or proper disposal. This applies to State agency
			purchased or leased phones.
			Contract users are directed to process old cell
			phones through the procedures for surplus
			property and through the contractors' cell phone
			reuse/recycling program.
			• An environmental certification for cell phones is
			on the EPEAT Roadmap for specification
			development at national level, after printing
			devices and televisions.

³ "Strategically Sourced" refers to contracts developed as part of a major Department of General Services Procurement Division initiative to consolidate major contracts to leverage better pricing. Find information on these contracts at: http://www.pd.dgs.ca.gov/StratSourcing/default.htm. Find information on state commodity contracts at http://www.documents.dgs.ca.gov/pd/contracts/contractsindex.htm. Additionally, there is a Master Services Agreement (MSA) for Universal Waste described at: http://www.pd.dgs.ca.gov/masters/e-waste.htm, designed to provide Universal Waste recycling collection services and recycling kits, some of which could be used in a producer responsibility program. This MSA is designed to process electronic waste, cathode ray tubes, fluorescent light tubes, and batteries. To utilize this MSA, state agencies must first receive approval for discarding their Universal Waste from the DGS's State Property Reuse program.

Section 5. EPP Policy and State Surplus Property

Another aspect of the State's role concerns the requirements for management of State surplus property and opportunities to better incorporate EPR and EPP policies with property reutilization policy.

Disposal Requirements

When State-owned surplus property in the possession of a State agency is no longer usable, the agency is responsible for arranging to have the property recycled or disposed of in an environmentally responsible manner. The action must have the prior approval of the Office of Fleet and Asset Management, which is responsible for reviewing and approving all State agency dispositions of State-owned surplus personal property and vehicles prior to disposition. The most common categories of surplus property are electronic equipment, furniture, and vehicles. All State agencies are required to extend the useful life of surplus property in their possession, following specific guidelines provided by the DGS Office of Fleet and Asset Management.

For unneeded personal property that is in fair, good, or excellent condition, the Surplus Property Program within the Office of Fleet and Asset Management may:

- Allow a department to make the property available to other State departments for property transfer for a limited time prior to becoming surplus;
- Allow the department to donate property to a public school or public school system for reuse;
- Require transfer of the property to Surplus Property Program to auction for sale, with the proceeds returning to Surplus Property Program.

DGS Procurement Division has electronic waste and universal waste recycling contracts in place for use by State agencies. Waste disposal services are typically provided by local government public works departments or private sector waste management companies operating in a particular area.

EPR and EPP Opportunities

Since still-usable State-owned surplus personal property represents a significant asset, there arises a conflict between two important policy objectives:

- 1. Maximizing the value to the State through restrictions on the "gift of State property."
- 2. Realizing potential environmental benefits through product take-back that could be expected to encourage product life cycle improvements by producers.

Leasing is an EPR mechanism that avoids the concerns of gifting. However, leasing with purchase options or trade-in options must be approved through Surplus Property Program, as this includes residual value to the State. In addition, the State purchases products primarily through vendors, not directly through manufacturers, so the ability to make use of efficiencies through reverse distribution is limited. One notable exception is procurement through the Prison Industry Authority (PIA).

PIA's Century Systems modular office furniture meets all of California's extremely stringent green standards and received Greenguard's environmental certification. In 2003, the East End Project in Sacramento won a Governor's Environmental and Economic Leadership Award in recognition of its status as a green building. PIA's Century Systems furniture was featured throughout much of the East

End Project. However, since private sector furniture liquidators are not permitted to purchase from PIA, spare and replacement parts are not available. This is one constraint that prevents reuse of PIA manufactured office furniture by non-government entities. Currently, if not reused by another State agency, the furniture is scrapped when no longer needed.

PIA also conducts recycling of mattresses, which reduces the burden on California's landfills. PIA recycles cotton core mattresses for all Department of Corrections and Rehabilitation institutions. This process provides sanitized, remanufactured mattresses at a lower price. Additional opportunities for PIA to take-back and refurbish its products should continue to be explored and progress reported.

It is recommended that DGS examine opportunities for EPR advancement in the management of State surplus property, pending resolution of various issues such as the restrictions on the "gift" of State property, and limited direct contact with manufacturers due to the nature of surplus property. Legal determinations may be necessary.

Glossary

Cal/EPA California Environmental Protection Agency.

CIWMB California Integrated Waste Management Board.

Cradle-to-cradle A term for the comprehensive management of a product to ensure

that the production systems and technologies, as well as the product itself, are totally waste-free. Cradle-to-cradle impacts include energy, water, and materials use; greenhouse gas and other air emissions; toxic and hazardous substances; materials recovery and

waste disposal; and worker safety.

Cradle-to-grave A term for the management of a product from generation to

disposal, often used in reference to solid or hazardous waste.

DGS Department of General Services.

EOL End-of-life. Refers to management issues regarding certain

products and substances.

EPEAT Electronic Products Environmental Assessment Tool (a standard to

which computer equipment can be certified).

EPP Environmentally Preferred Purchasing. As defined in California

law, "environmentally preferable purchasing" means the

procurement or acquisition of goods and services that have a lesser or reduced effect on human health and the environment when compared with competing goods or services that serve the same purpose. This comparison shall take into consideration, to the

extent feasible, raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, disposal, energy efficiency, product performance,

durability, safety, the needs of the purchaser, and cost.

EPP Task Force The Secretary of the State and Consumer Services Agency (SCSA)

in consultation with the California Environmental Protection Agency (Cal/EPA) established the Environmentally Preferable Purchasing (EPP) Task Force to develop a strategy to achieve the goals found in AB 498 (Chan, Chapter 575, Statutes of 2002). The strategy is articulated through the Task Force's Charter and its

action plan.

EPR Extended Producer Responsibility.

EU European Union.

Extended Producer Responsibility The extension of the responsibility of producers, and all entities

involved in the product chain, to reduce the cradle-to-cradle impacts of a product and its packaging. The greatest responsibility lies with the producer, or brand owner, who makes design and marketing decisions. This definition recognizes a shared responsibility, but one that lies mostly with the producer. The reference to the product chain refers to suppliers, manufacturers, retailers, users and recyclers. EPR focuses on enhancing environmental benefits through improved product design for reduction and reuse, and increased collection and recycling where needed, without transferring end-of-life management problems

elsewhere.

Greenguard Environmental Institute, an environmental certification

organization.

Green Seal An independent non-profit organization that provides

environmental certifications.

Manufacturer responsibility

Take-back program

Synonymous with extended producer responsibility. Synonymous with extended producer responsibility.

MSA Master Services Agreement

PIA Prison Industry Authority.

Product life cycle The series of steps involved in manufacturing; distributing; using;

reusing, recycling, and ultimately disposing of a product.

Product stewardship Synonymous with extended producer responsibility, product take-

back, and environmentally preferred purchasing (EPP).

REACH Research, Evaluation, and Authorization of Chemicals (an EU

directive).

Reverse distribution If a product is not sold or used, the manufacturer accepts its return.

This may or may not be for credit.

SCSA State and Consumer Services Agency.

US EPA United States Environmental Protection Agency.

Universal waste (u-waste)

Any of the following wastes that are conditionally exempt from

classification as hazardous wastes: batteries, thermostats, lamps,

cathode ray materials

WSCA Western States Contracting Alliance.

WEEE Waste Electrical and Electronic Equipment (an EU directive).